

AMENDMENTS TO THE CLAIMS

1-9. (Cancelled)

10. (New) A process for producing CMP-N-acetylneuraminic acid (CMP-NeuAc), which comprises:

adding N-acetylglucosamine (GlcNAc) and cytidine 5'-monophosphate (CMP) to a mixture of yeast cells, *Escherichia coli* expressing N-acetylglucosamine-6-phosphate 2-epimerase (GlcNAc-6P 2-epimerase) and N-acetylneuraminic acid synthase (NeuAc synthase), inorganic phosphoric acid, magnesium, an energy source and CMP-N-acetylneuraminic acid synthase (CMP-NeuAc synthase);

and inducing reaction of the mixture,
wherein ATP is not utilized.